

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

In the Matter of	)	
	)	
	)	
Requirements for Digital Television	)	ET Docket No. 05-24
Receiving Capability	)	
	)	

**REPLY COMMENTS OF TTE CORPORATION**

**I.     INTRODUCTION**

TTE Corporation (“TTE”) respectfully replies to Comments filed in the Further Notice of Proposed Rulemaking in the above-captioned proceeding, in which the Commission proposes to accelerate the date on which all new television receiving equipment must include the capability to receive over-the-air broadcast DTV signals from July 1, 2007 to a date not later than December 31, 2006, and further inquires whether to extend this requirement to receivers with screen sizes below 13 inches.<sup>1</sup>

There is ample evidence in the record of this proceeding that, particularly in light of the established 18-month manufacturing cycle governing the integration of new technologies in television products (a cycle recognized without exception by the Commission), the proposed “no later than December 31, 2006” deadline simply would not be achievable without seriously threatening the quality and availability of digital television products and causing steeper price increases than would be the case without acceleration. To avoid such problems, and the negative consequences for the DTV transition that would flow from them, the earliest achievable date for 100% integration of DTV tuning and reception capability in the 13” to 24” sized televisions would be March 1, 2007. In addition to its being achievable, and in light of the broad, bipartisan support in Congress for extending the statutory deadline for the

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<sup>1</sup> *In the Matter of Requirements for Digital Television Receiving Capability*, Report and Order and Further Notice of Proposed Rulemaking, ET Docket No. 05-24 (rel. June 9, 2005) (“*R&O*” and “*FNPRM*,” as applicable).

cessation of analog broadcast transmissions to sometime in 2009, a March 1, 2007 deadline would more than adequately serve the Commission's goal of ensuring that all TV receivers 13" or larger include a DTV tuner by the end of the DTV transition. Indeed, a March 1, 2007 deadline would likely give consumers anywhere from 22-34 months before analog broadcasts cease in which to make the necessary accommodations to DTV technology. Finally, TTE supports the Commission's proposal to extend its DTV integration mandate to television sets with screen sizes below 13 inches.

## **II. STATEMENT OF INTEREST**

TTE Corporation was established in 2004 between the largest global television manufacturer, TCL, and Thomson, historically the manufacturer of RCA-brand television sets. TTE specializes in research and development, manufacturing, and sales of TV products. TTE offers a complete range of television products – from budget to premium, from basic features to high-end innovation. RCA-brand televisions now come from TTE Corporation.

TTE is focused on ensuring that DTV becomes truly affordable to the average consumer as quickly as possible, having recently announced that it intends to offer this year a line of standard-definition TVs ("SDTVs") that enable consumers to receive all terrestrial digital broadcasts, including all multicasts, for as little as under \$300 for a 27" TV.

## **III. THE RECORD IN THIS PROCEEDING REVEALS WIDESPREAD RECOGNITION THAT ANY ACCELERATION OF THE DEADLINE FOR DTV TUNER INTEGRATION IN 13" TO 24" TVS MUST, FIRST AND FOREMOST, BE ACHIEVABLE BY THE GENERAL POPULATION OF MANUFACTURERS**

TTE supports the Commission's and Congress's goal of driving DTV integration into television products as quickly as reasonably practicable so as to hasten the final conversion to DTV and the availability of valuable and urgently needed spectrum, particularly for public safety use. It is imperative, however, that an acceleration of the current deadline for the smallest-sized TVs (13" to 24") be driven by what is actually *feasible* for manufacturers to achieve. Indeed, advancing this deadline to a date that manufacturers cannot realistically meet in light of the long-recognized 18-month manufacturing cycle,

would introduce substantial and unnecessary risks, not only for consumers but also for the DTV transition overall.

The record on this point is crystal clear. DTV manufacturers unanimously agree that the Commission's proposed December 31, 2006 (or earlier) deadline for all remaining TV products, including TVs with screen sizes 13" to 24," would not be feasible without serious and undesirable consequences.<sup>2</sup> Other parties, including some of the staunchest proponents of accelerating this final deadline, also acknowledge that feasibility and/or reasonableness are key factors to consider in selecting a new deadline for these products.<sup>3</sup> Most importantly, the Commission itself recognizes the importance of adopting achievable deadlines for DTV integration in its *Report and Order*, stating:

It makes little sense to require products to be on the market before the general population of manufacturers can deliver them....If manufacturers were not able to meet our deadline, they might cease production of [those-sized] sets or switch to monitor products that do not include TV tuners.<sup>4</sup>

In fact, the record of this proceeding is remarkable because it reveals neither any evidence *nor even the suggestion* that a December 31, 2006 or earlier deadline would be achievable for any manufacturer, much less for the general population of manufacturers. As discussed further below, TTE respectfully adds its voice to this consensus view.

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<sup>2</sup> See Comments of the Consumer Electronics Association and the Consumer Electronics Retailers Association ("CEA/CERC") at 7-9; Comments of Sharp Electronics Corporation ("Sharp") at 2; and Philips Electronics North America Corporation ("Philips") at 3-5. Similarly, TiVo warns that a December 31, 2006 deadline for DTV integration in digital video recorders would "have the unintended consequenc[e] of significantly disrupting the market and causing economic hardships..." Comments of TiVo Inc. ("TiVo") at 1. See also Letter of Jim Morgan (on behalf of Sony Electronics Inc.) in ET Docket No. 05-24, August 4, 2005.

<sup>3</sup> See Comments of the Association of Maximum Service Television Inc. and the National Association of Broadcasters ("MSTV/NAB") at 10; Comments of The Walt Disney Company ("Disney") at 3; Comments of the Association of Public Television Stations ("APTS") at 2; Comments of ATI Technologies, Inc. ("ATI") at 4.

<sup>4</sup> R&O at ¶ 20.

A. **The Commission's Proposed Deadline For DTV Integration in All Television Products – December 31, 2006 At the Latest – Fails the "Achievability" Test And Risks Both Product Quality and Availability**

The Commission's proposed deadline of December 31, 2006 (or earlier) for DTV integration in all television products, including TVs with screen sizes 13" to 24", fails to meet the Commission's own, well-articulated, "achievability" criterion because it would overly compress the 18-month manufacturing cycle required for the integration of new technology in these products.

Assuming the Commission were to adopt a Second Report and Order in this proceeding at the earliest possible date (*i.e.*, September of this year), and the "latest" December 31, 2006 deadline was established, manufacturers would have only 15 months, at most, to achieve what normally – and especially here – requires 18 months to accomplish. As all other television (and TV-related) manufacturers affirm, due to the complexity of digital television technology integration, meeting such an accelerated deadline, at least six months closer than that provided under current FCC rules, would be extremely difficult, if not impossible, without introducing unacceptable levels of complication and risk in terms of both product quality and/or availability as well as needlessly steep price increases for consumers.<sup>5</sup>

To understand why this is true, it is first necessary to address and correct a false assumption that is often made by non-manufacturers, including broadcasters, about DTV integration and the manufacturing cycle, namely the assumption that adding DTV reception capability to an existing television receiver model involves little more than soldering a single tuner/chip onto a circuit board. In fact, DTV integration requires a re-engineering effort – and in the case of smaller-sized sets, involves an entirely new chassis – beginning with modifications to the chassis hardware and software to accept the digital tuner, demodulator and other essential circuitry and related components; followed by cabinet modifications to accept the new chassis, all new reliability and safety testing, and, of course, regulatory

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<sup>5</sup> See CEA/CERC at 7-9; Sharp at 2-3, Philips at 3-5; and TiVo at 2.

approvals (as required for all radio-frequency emitters). It is also necessary to factor into this cycle the need to ensure timely availability from outside suppliers of key electronics components and other parts. The 18-month cycle entails all of these, beginning with chassis design and concluding when retailers make their final product placement decisions. Most importantly, as the Commission has consistently recognized,<sup>6</sup> it is a process that, permitted to proceed in regular order, has resulted in consumers being offered reliable, high quality products.

The Commission clearly recognized the fact that DTV integration is not something that can be achieved all at once when it adopted its tuner mandate schedule in August 2002. That schedule properly allows manufacturers to integrate DTV into their sets serially, starting with the larger sets (the sets that have driven HDTV sales and which are less price-sensitive to the added cost of DTV tuning capability), and moving downward, incrementally, to the smaller-sized receivers.

In fact, meeting the phased-in deadlines for DTV integration in the larger-chassis receivers has been an all-consuming effort for Thomson and now TTE. TTE is currently dedicating all available resources to meet the accelerated DTV tuner requirement for its mid-sized sets. Consequently, we are only in the very earliest planning and design phases of integrating DTV capability into our smallest-sized sets, which will require a new re-engineering effort, as well as miniaturization, to modify the different chassis used in our smaller TV models. That work cannot be compressed into 15 months or less without putting at risk consumers' expectations that the high-quality products they expect will be available. It is not a risk that either consumers or the transition can afford to take.

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<sup>6</sup> See discussion *infra*, at 6-7.

**B. The Commission Should Not Deviate From Its Long-Standing Recognition of The 18-Month Manufacturing Cycle**

The Commission and Congress both have recognized the importance of preserving the 18-month manufacturing cycle in *every single instance where a new television technology has been mandated*.

Analog closed captioning.<sup>7</sup> Digital closed captioning.<sup>8</sup> Analog V-chip program-blocking.<sup>9</sup> Digital V-chip program blocking.<sup>10</sup> Digital television reception.<sup>11</sup> Digital broadcast content protection technology

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<sup>7</sup> In that instance, legislation adopted by Congress – and signed into law on October 15, 1990 – required television sets 13” and larger to be equipped with built-in decoder circuitry as of July 1, 1993. The law afforded television manufacturers 33 months from the date of enactment, and 27 months from the adoption of implementing rules by the FCC (which Congress mandated be completed within 180 days of enactment), to implement closed captioning capability. *Television Decoder Circuitry Act of 1990* (Pub. L. 101-431).

<sup>8</sup> See, *Closed Captioning Requirements for Digital Television Receivers, Closed Captioning and Video Description of Video Programming, Implementation of Section 305 of the Telecommunications Act of 1996, Video Programming Accessibility*, Report and Order, 15 FCC Rcd 16788 at 54-58 (2000). (“...In previous Commission decisions we have taken into account the complexities involved in redesigning television receivers and have stated that our rules should conform with television design cycles and provide a smooth transition for product introduction. We continue to believe that our rules must reflect manufacturing cycles. It would be counterproductive to our goal of ensuring accessibility to closed captioning if our compliance deadline did not allow for a thorough product design and testing period....”) (citations omitted)

<sup>9</sup> See, *Technical Requirements to Enable Blocking of Video Programming Based on Program Ratings, Implementation of Sections 551(c), (d), and (e) of the Telecommunications Act of 1996*, Report and Order, 13 FCC Rcd 11248 at 21-24 (1998) (“[T]he design cycle for a television receiver model takes approximately 18-24 months....We believe that our rules should conform with these schedules and provide a smooth transition for product introduction. We realize that, given these schedules, manufacturers are well into the production phase of sets that will be released in July 1998. Therefore, we will not require that these sets contain blocking technology. Furthermore, it would be detrimental to consumer confidence if forced compression of manufacturer design schedules resulted in the release of an unsatisfactory product....”) (citations omitted).

<sup>10</sup> See, *Second Period Review of the Commission’s Rules and Policies Affecting the Conversion to Digital Television*, Report and Order, 19 FCC Rcd 18279 at 159 (2004). (“We understand that the design cycle of a television receiver model is generally about 18 months. The Commission has previously taken into consideration receiver design cycles in proceedings that required the introduction of new television technology.... Therefore, we believe it is reasonable to provide an 18 month transition period. After the transition period, all digital television receivers will be required to provide v-chip functions following the regulations that we adopt in this proceeding.”) (citations omitted)

<sup>11</sup> See, *Review of the Commission’s Rules and Policies Affecting the Conversion To Digital Television*, Report and Order and Second Memorandum Opinion and Order, 17 FCC Rcd 15978 (2002) at ¶ 41. (“We believe the five year phase-in period will be sufficient for manufacturers to be able to incorporate a DTV tuner into all of these television receiver products, such that the final phase can be completed with minimum impact. To further minimize the burden on manufacturers, we have scheduled the implementation dates for the various categories of receivers to correspond to the July 1 date each year when consumer electronics manufacturers traditionally introduce new products.”) (citation omitted)

(“Broadcast Flag”).<sup>12</sup> And for good reason: as discussed *supra*, one of the primary reasons for the television set’s success as a consumer product is the established 18-month design and manufacturing cycle. Simply, it is critical to the production of a high quality product that meets the consumer’s expectations. At such a crucial moment for the DTV transition, when ensuring consumers’ glidepath to digital is as smooth and trouble-free as possible, it would be imprudent from a policy and consumer perspective – and arbitrary and capricious as a matter of law – for the Commission now to disregard suddenly the importance of this production cycle.

**C. If the Commission Determines It Must Accelerate The Deadline for DTV Integration In Televisions 13” and Above, March 1, 2007 Is The Earliest Achievable Deadline**

If, despite the strong likelihood that Congress will replace the current “soft” statutory deadline for the end of the DTV transition with a “hard” deadline of sometime in 2009, an extension of 2-3 years, and despite the major cost implications, the Commission still believes it is imperative to accelerate the current July 1, 2007 deadline for integration of DTV tuning and reception capability in all televisions 13” and above, TTE urges it to adopt a deadline that manufacturers can achieve without putting quality and availability at risk. If the Commission adopts final rules by September 2005, the earliest feasible date, consistent with the manufacturing and retail placement cycle, would be March 1, 2007.<sup>13</sup> Importantly, the feasibility of this date has been recognized by other DTV manufacturers, including the industry’s trade association, with a similar caveat that final action be completed in the very near-term.<sup>14</sup>

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<sup>12</sup> In the case of the Broadcast Flag, the FCC’s rules requiring integration of digital content protection technology, adopted November 4, 2003, were to take effect July 1, 2005, affording manufacturers more than 18 months to comply with the new requirement. *See In the Matter of Digital Broadcast Content Protection*, Report and Order and Further Notice of Proposed Rulemaking in MB Docket No. 02-230, 18 FCC Rcd 23550 (2003) at ¶ 57, *vacated sub nom. American Library Association, et al. v. FCC*, No. 04-1037 (D.C. Cir. May 6, 2005).

<sup>13</sup> Notably, there is congressional support for accelerating the July 1, 2007 deadline to March 1, 2007. The bipartisan “SAVE LIVES Act” (S. 1268), introduced by Senators McCain and Lieberman targets March 1, 2007 for the integration of DTV capability in sets 13” to 24.”

<sup>14</sup> *See* CEA/CERC at 10-11; Philips at 9.

**D. The Virtually Inevitable Enactment of Legislation Targeting a 2009 Hard Deadline Undercuts the Urgency of Adopting Such a Dramatically Accelerated Deadline for Smallest-Size Televisions**

The Commission's stated rationale for accelerating this final deadline is to "...advance the date for all TV receivers to include a DTV tuner to a date not later than the statutory target date for the end of the transition."<sup>15</sup> However, while the statutory date, at this moment, is a "soft" deadline of December 31, 2006 (given that the 85 percent "exception" to that deadline makes it extremely unlikely that it would be triggered in any broadcast market anywhere near that date), key members of Congress, including the Chairmen and virtually every other member of the Senate and House committees of jurisdiction on this matter (as well as many others) are supporting enactment of legislation – by September or October, 2005 – that would extend the statutory deadline, likely to sometime in 2009.<sup>16</sup> Thus, even if the 100-percent DTV tuner mandate deadline were to remain at July 1, 2007, consumers still would have at least 18 months – and perhaps as long as 30 months – prior to the end of the transition to make their DTV purchases. As one manufacturer correctly notes,

The strong likelihood that a 2009 hard deadline will be enacted [by Congress] this year, coupled with the universally held view that the December 31, 2006 current statutory target will not be met under any circumstances renders untenable the Commission's reliance on the December 31, 2006 date as the basis for its proposed acceleration of the DTV tuner mandate.<sup>17</sup>

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<sup>15</sup> *FNPRM* at ¶ 21.

<sup>16</sup> To wit, Senate Commerce Committee Chairman Stevens has publicly discussed a 2009 cut-off date. In addition, former Senate Commerce Committee Chairman John McCain has introduced legislation, S. 1268, co-sponsored by Senator Joe Lieberman, that would set a hard deadline of January 1, 2009. Similarly, May 20, 2005 draft legislation released by the House Energy and Commerce Committee Republican staff targets December 31, 2008.

<sup>17</sup> Philips at 7. *See also* CEA/CERC at 9, n.10 ("It is unrealistic, and at odds with the discussions in the Congressional committees of jurisdiction, to suppose *either* that under the existing statute there will be an FCC Order to end analog broadcasting by the end of 2006, *or* that the Congress will enact a "hard date" any earlier than December 31, 2008. Regulations that apply to real world products and markets should not be based on acknowledged speculation.")



**IV. THE COMMISSION’S FINDING THAT DTV TUNER INTEGRATION IN THE SMALLEST SIZED SETS WILL RESULT IN ONLY A “MODEST” INCREASE IN CONSUMER PRICES IS ERRONEOUS AND CONTRARY TO THE DATA IN THE RECORD**

A principal rationale employed by the Commission to support its proposed December 31, 2006 deadline for all remaining (including smallest-sized) TV products is that the increased costs associated with DTV integration in those products will be “modest.”<sup>18</sup> The record of this proceeding does not support such a conclusion. In fact, under almost any scenario, integrating DTV tuning and reception capability will result in substantial increases in the costs of smaller-sized sets, as much as *doubling* the price of many 13” televisions,<sup>19</sup> as well as other TV-related devices.<sup>20</sup>

To wit, a typical 13” analog television set today retails between \$60 and \$80.<sup>21</sup> Today, the cost (not retail price increment) to add integrated standard-definition digital tuning and reception capability (in TTE products) is approximately \$70. While this “digital differential” cost will decline as component manufacturers achieve economies of scale, and consistent with the estimates of Zoran Corporation (*i.e.*, that the cost will drop to “less than \$70” by the winter of 2006) upon which the Commission relies, it will not drop so dramatically as to be anywhere near a “modest” increase for these small-sized sets.

Unfortunately, that will likely still be the case under almost any near-term integration deadline for these models, a truism that is inescapable given the level of affordability of these sets. Unquestionably, however, the more dramatic the acceleration of the deadline for small sets, the greater the cost impact on consumers. While a March 1, 2007 deadline will not eliminate the “sticker shock” experienced by consumers purchasing these sets post-deadline, it will at least help to reduce the price impact somewhat.

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<sup>18</sup> See *FNPRM* at 21.

<sup>19</sup> See *CEA/CERC* at 9-10 and *Philips* at 6.

<sup>20</sup> See *TiVo* at 3.

<sup>21</sup> One RCA 13” model retails at Best Buy for as little as \$54.99.

V. **IT WOULD BE REASONABLE TO EXTEND THE DTV TUNER MANDATE TO TRADITIONAL TELEVISIONS WITH SCREEN SIZES BELOW 13"**

In light of the ultimate cessation of analog signals, it is logical to apply the Commission's DTV tuning/reception mandate to televisions with screen sizes smaller than 13." However, like one other manufacturer,<sup>22</sup> we would urge that such a requirement be applied only to devices whose primary function is receiving and display of over-the-air television programming. Mobile phones and other mobile devices that include a television capability as a secondary feature are not, by their very design, primarily used by consumers to receive television programming. Nor do these devices have any meaningful impact on the DTV transition.

VI. **CONCLUSION**

For these reasons, TTE supports an acceleration of the deadline for DTV integration in televisions 13" to 24" to the earliest *achievable* date, March 1, 2007. TTE also supports extending the digital integration requirement to cover televisions of screen sizes below 13."

Respectfully submitted,

TTE CORPORATION.

A handwritten signature in dark ink, appearing to read "Greg Bosler", is written over the printed name and title.

Greg Bosler  
Executive Vice President  
TTE Corporation  
10330 North Meridian Street, INH-430  
P.O. Box 1976  
Indianapolis, IN 46206-1976  
317-587-3118

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<sup>22</sup> Philips similarly urges that an expanded mandate to receivers with screen sizes below 13" should include only devices that are "intended primarily to receive broadcasts, not other types of over-the-air video reception devices [such as cellphones and PDAs]." Philips at 9 (emphasis in original).